

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 21012 - L2 Version 2
Chandra X-Ray Center

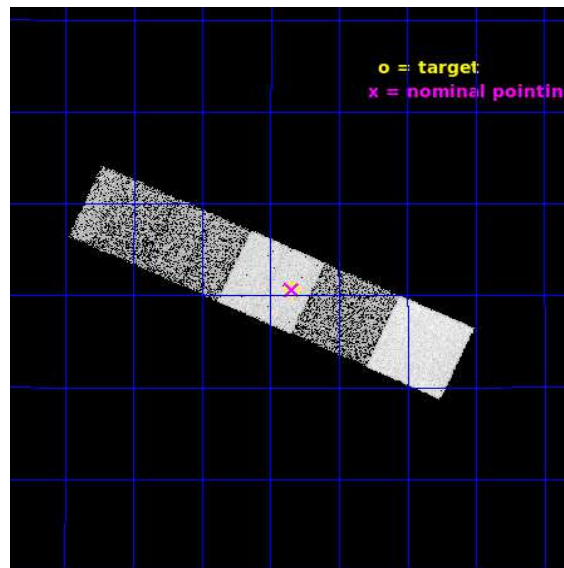
L2 Processing Date : Oct 25 2020

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1 Front

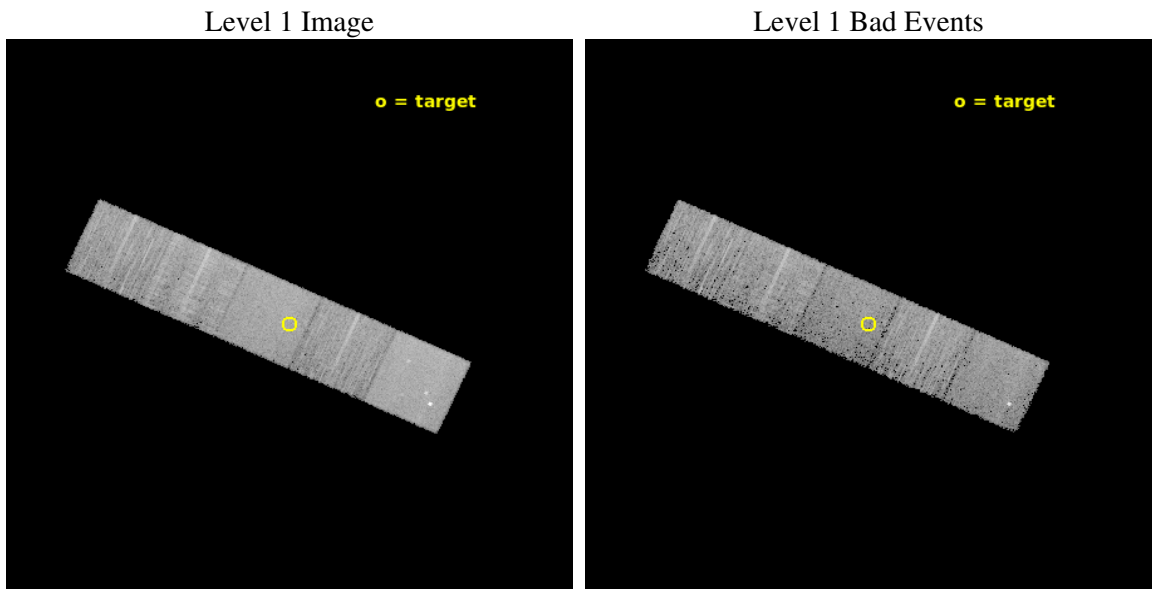
seq_num	703653	Sequence number
obs_id	21012	Observation id
title	LOW SURFACE BRIGHTNESS GALAXIES AND THE BLACK HOLE OCCUPATION FRACTION	Proposal title
observer	Elena Gallo	Principal investigator
object	LSBC F574-09	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	190.585833	Observer's specified target RA [deg]
dec_targ	17.50975	Observer's specified target Dec [deg]
ra_nom	190.58593357798	Nominal RA [deg]
dec_nom	17.510914593992	Nominal Dec [deg]
roll_nom	204.55330829747	Nominal Roll [deg]
revision	2	Processing version of data
ontime	5952.0000458956	Sum of GTIs [s]
livetime	5874.2327834973	Livetime [s]
ontime5	5952.0000458956	Sum of GTIs [s]
ontime6	5952.0000458956	Sum of GTIs [s]
ontime7	5952.0000458956	Sum of GTIs [s]
ontime8	5952.0000458956	Sum of GTIs [s]
ontime9	5952.0000458956	Sum of GTIs [s]
l2events	70540	Number of level 2 events



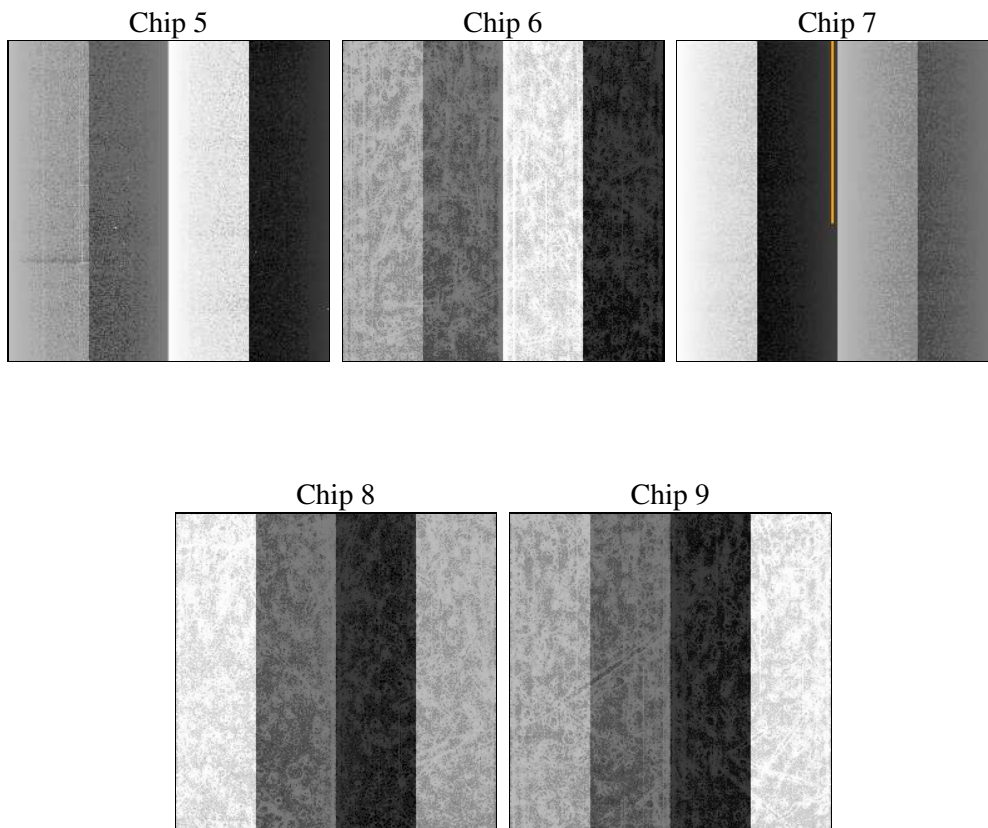
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5900.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	5952.0000458956	Sum of GTIs [s]
caldbver	4.9.3	 	ontime5	5952.0000458956	Sum of GTIs [s]
date	2020-10-25T12:26:27	Date and time of file creation	ontime6	5952.0000458956	Sum of GTIs [s]
revision	2	Processing version of data	ontime7	5952.0000458956	Sum of GTIs [s]
			ontime8	5952.0000458956	Sum of GTIs [s]
			ontime9	5952.0000458956	Sum of GTIs [s]
			l1events	285661	Number of level 1 events

2.1.4 Events

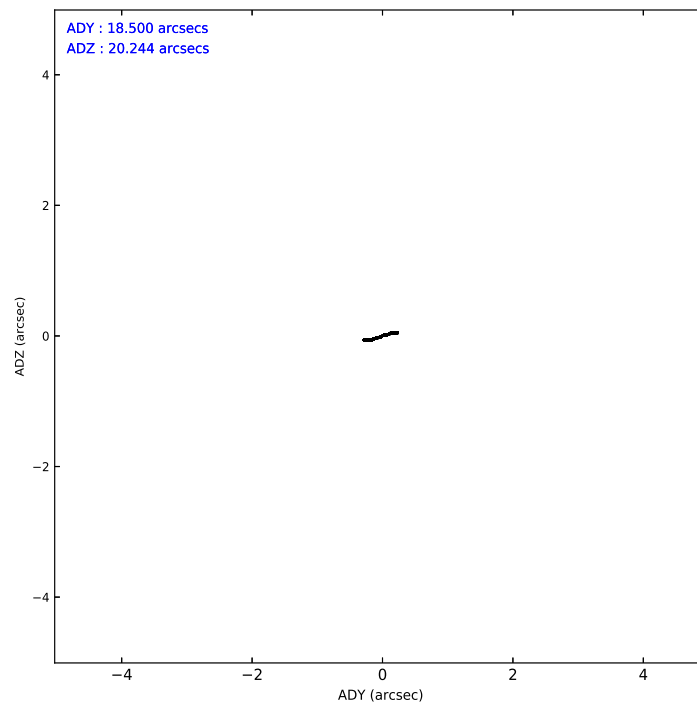
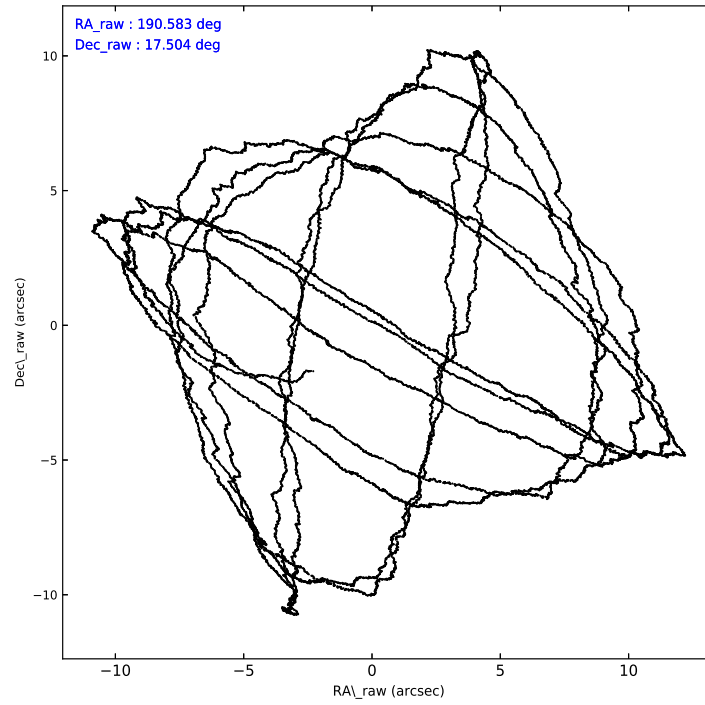
	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	72380	47645	57822	59691	48123
rejected events	37688	42500	32802	44788	42604
rejected %	52%	89%	56%	75%	88%

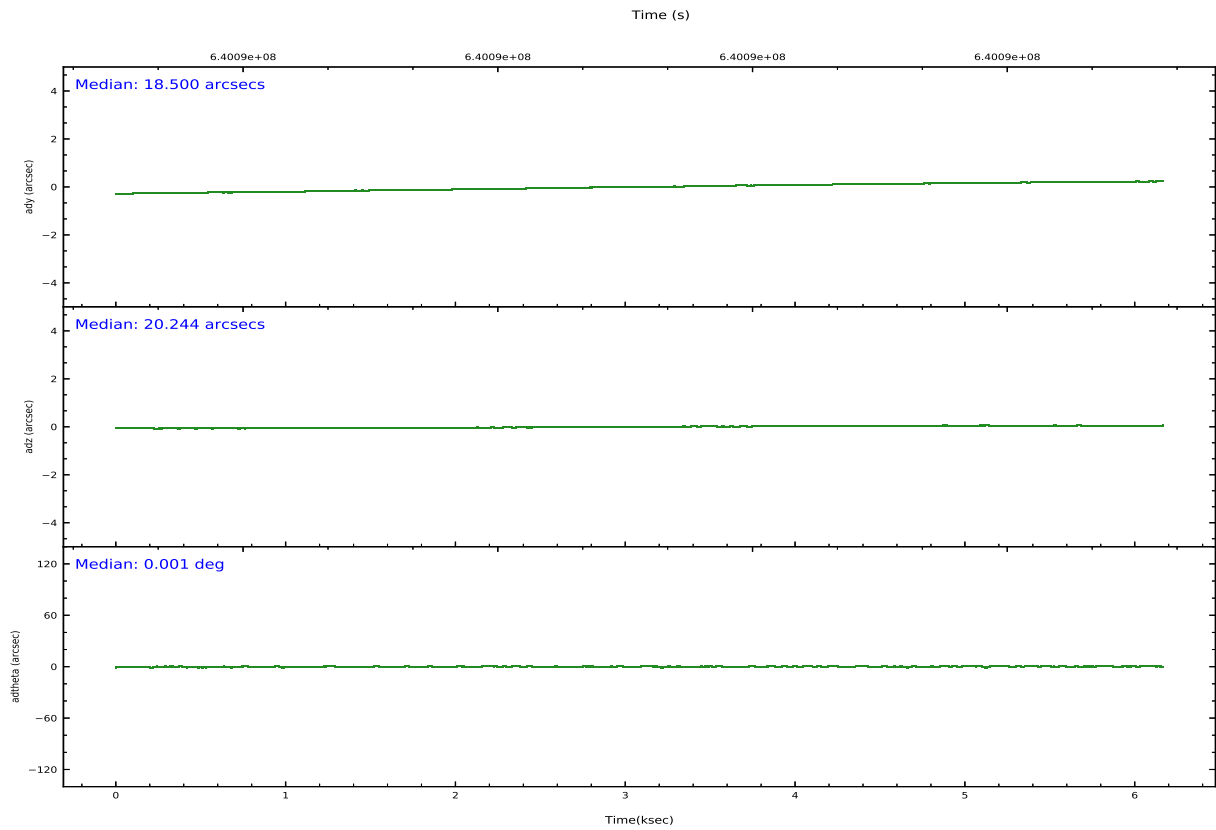
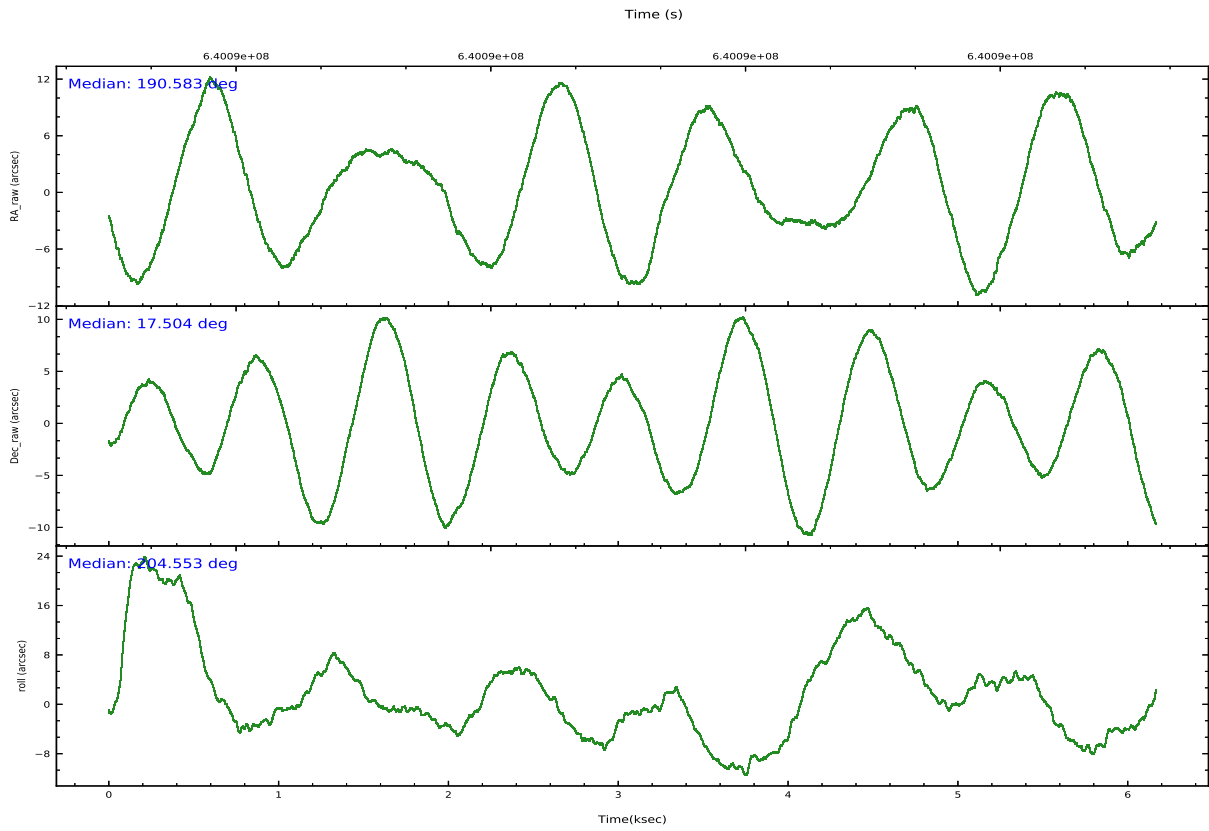
	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	2718	1629	2152	4138	1832
	3%	3%	3%	6%	3%
grade 1 events	293	20	73	39	25
	0%	0%	0%	0%	0%
grade 2 events	11053	1319	5224	3656	1289
	15%	2%	9%	6%	2%
grade 3 events	1149	466	1971	1542	569
	1%	0%	3%	2%	1%
grade 4 events	936	461	2025	1452	527
	1%	0%	3%	2%	1%
grade 5 events	5180	2013	5724	3158	2315
	7%	4%	9%	5%	4%
grade 6 events	18855	1274	13669	4122	1308
	26%	2%	23%	6%	2%
grade 7 events	32196	40463	26984	41584	40258
	44%	84%	46%	69%	83%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-56789	ACIS-56789	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	190.599770	190.58593357798	CCD I2 on	N	N
[deg] Pointing Dec	17.525948	17.510914593992	CCD I3 on	N	N
[deg] Pointing Roll	204.395231	204.55330829747	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O1	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	Y	Y
[s] Observation start time (MET)	640089518.184000	640088533.06611	CCD S5 on	O2	Y
Observation start date	2018-04-14T10:37:29	2018-04-14T10:22:13	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	640095418.184000	640095822.86654	On-chip summing requested	N	N
Observation end date	2018-04-14T12:15:49	2018-04-14T12:23:42	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



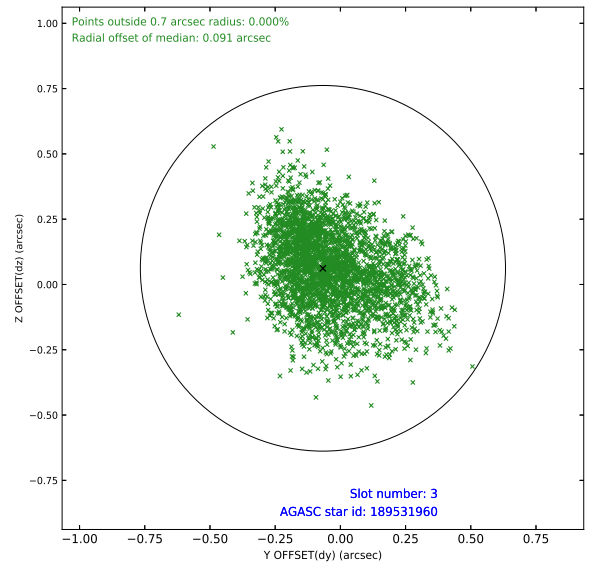
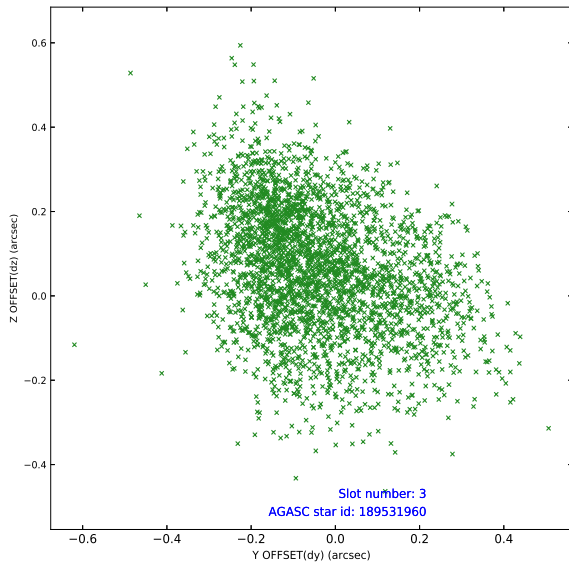


Slot Statistics

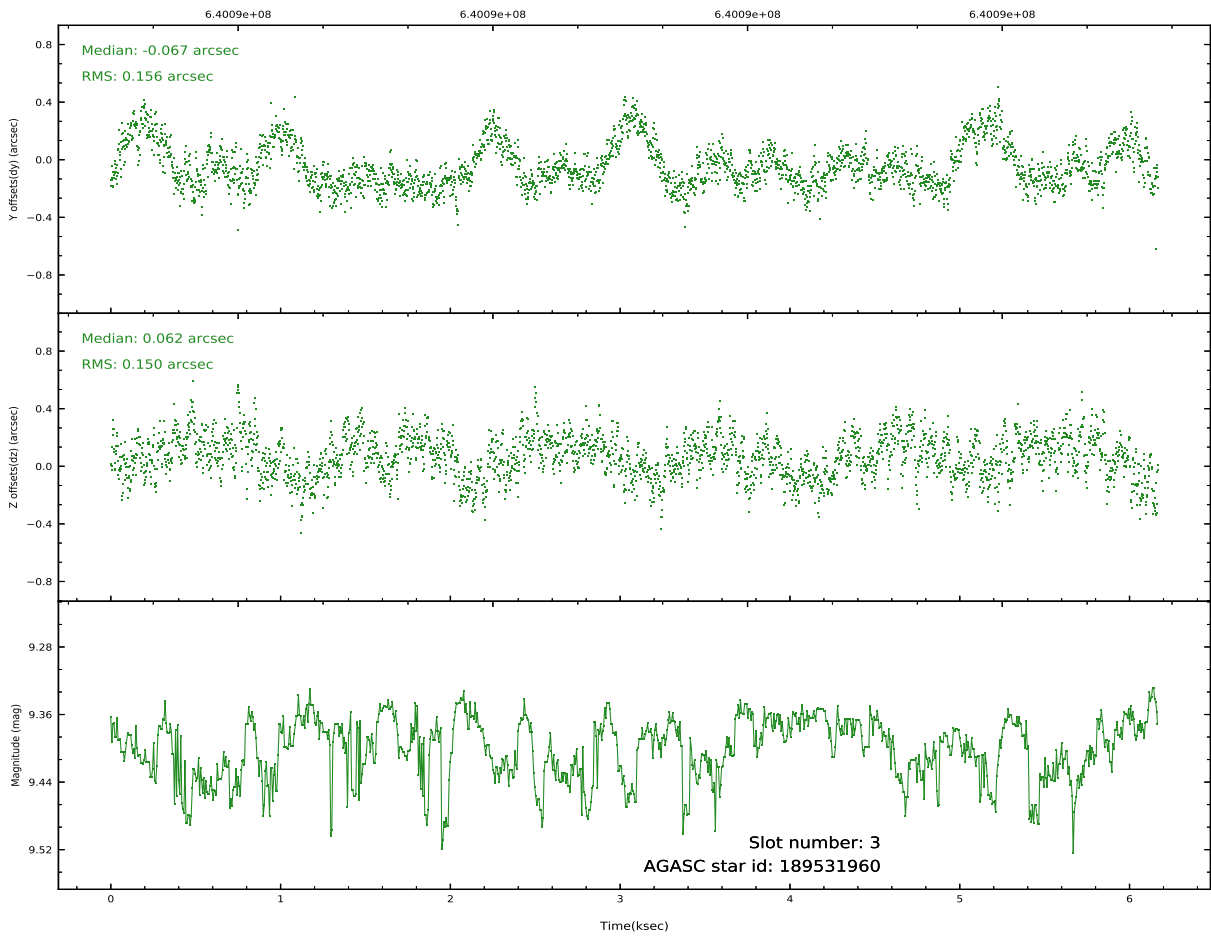
slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		ACIS-S-2	7.12	1505	1.000	-0.025	-0.025	0.007	0.013	0.000000	0.000000	-771.74	-1741
1	FID		ACIS-S-4	7.22	1505	1.000	0.116	-0.035	0.007	0.012	0.000000	0.000000	2141.41	165
2	FID		ACIS-S-6	7.36	1505	1.000	-0.119	0.067	0.008	0.013	0.000000	0.000000	391.60	804
3	GUIDE	used	189531960	9.40	3005	1.000	-0.067	0.062	0.228	0.379	190.815463	17.098020	-37.93	1708
4	GUIDE	used	189533392	9.36	3008	1.000	0.099	-0.027	0.207	0.356	190.100367	17.070110	2243.12	783
5	GUIDE	used	189534408	9.17	3008	1.000	-0.010	0.097	0.242	0.386	190.843395	17.828497	-1209.45	-646
6	GUIDE	used	189546776	8.67	3008	1.000	-0.065	-0.071	0.142	0.240	191.177816	17.700495	-2066.48	243
7	GUIDE	used	189542224	9.11	3001	1.000	0.025	-0.069	0.212	0.372	190.259731	18.115027	183.09	-2412

2.4 Star Slots

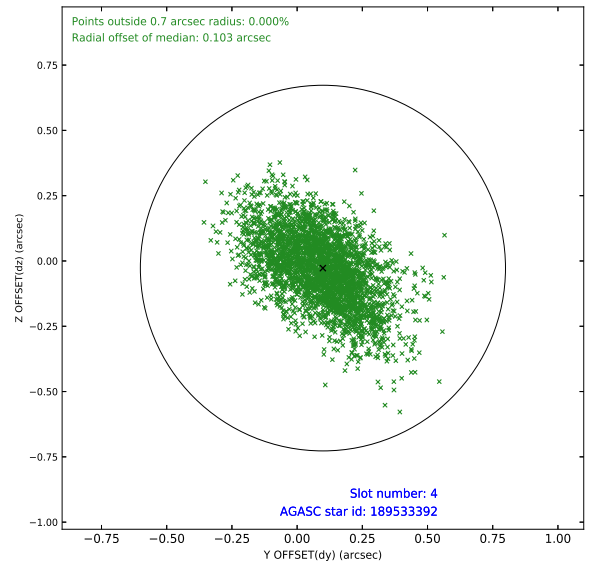
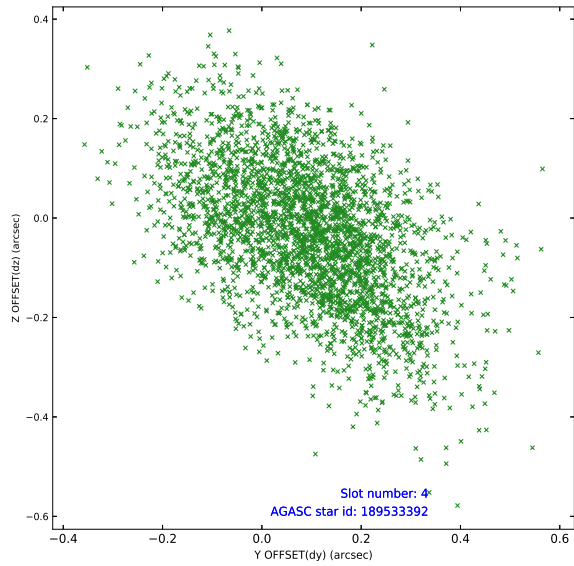
2.4.1 Slot 3



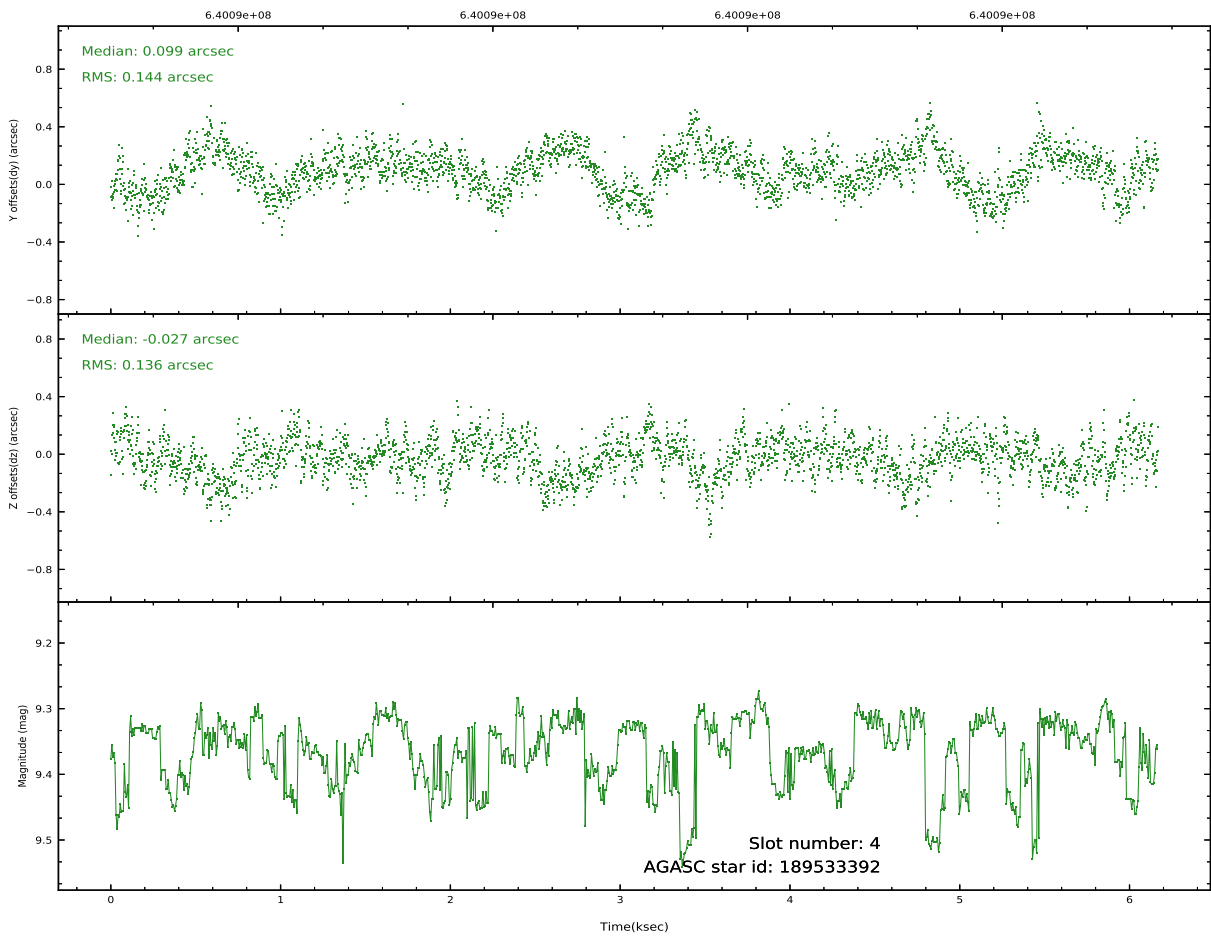
Time (s)



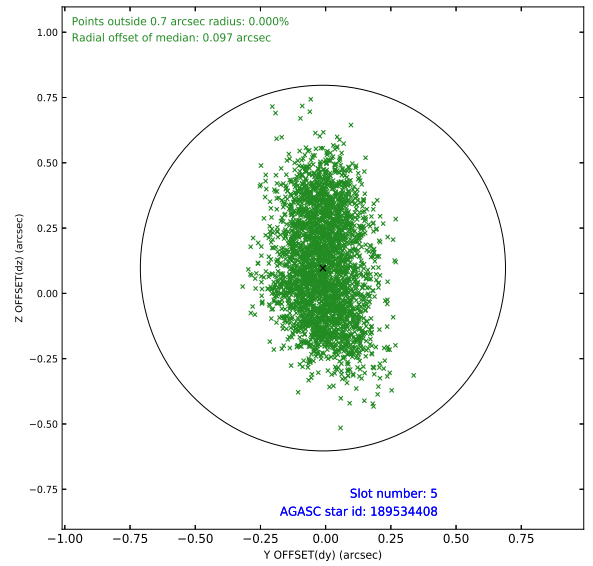
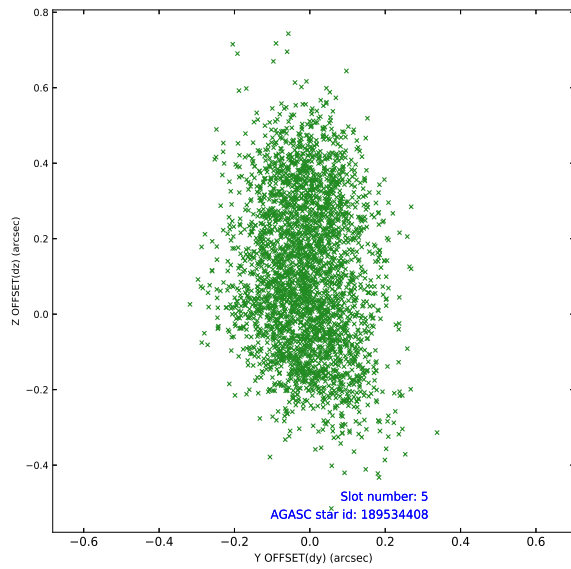
2.4.2 Slot 4



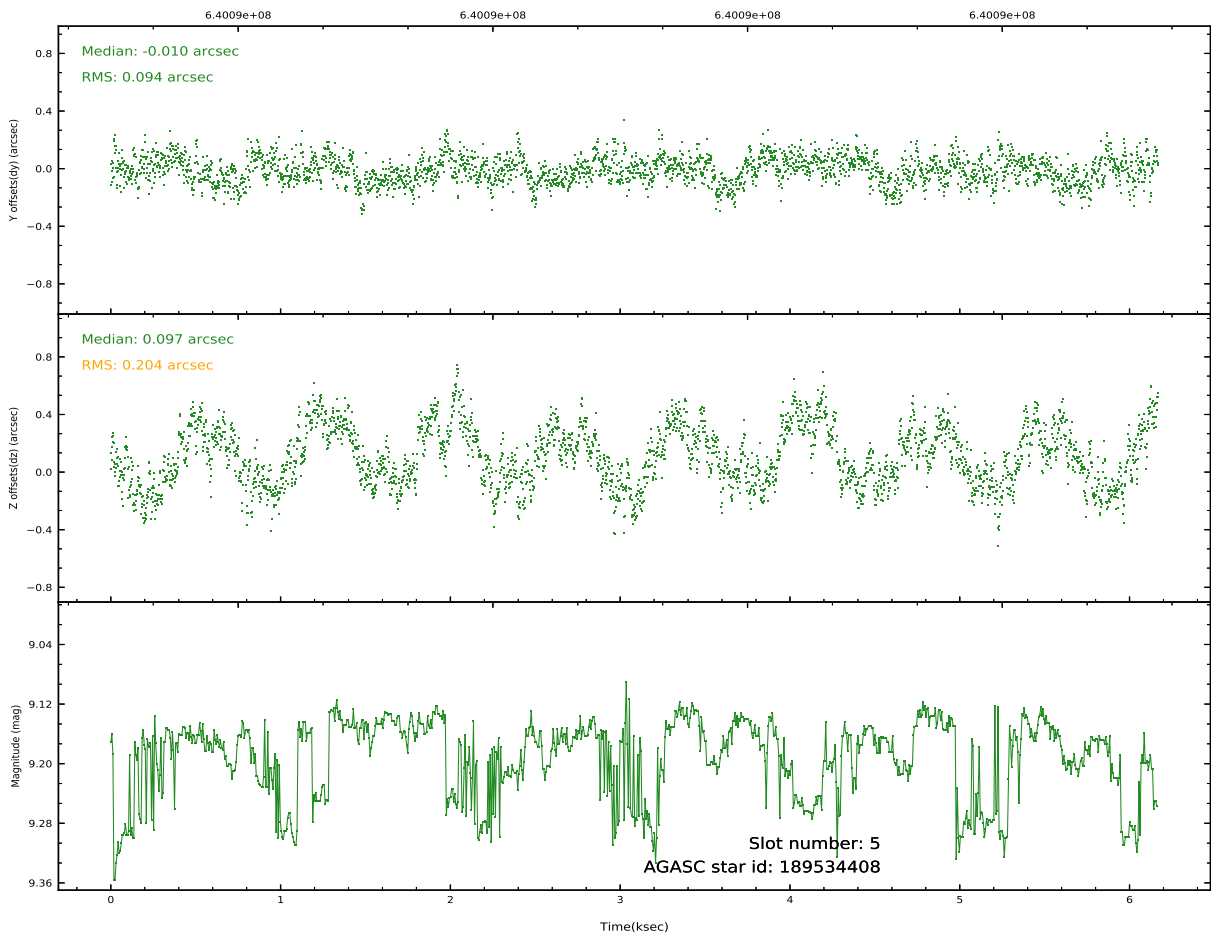
Time (s)



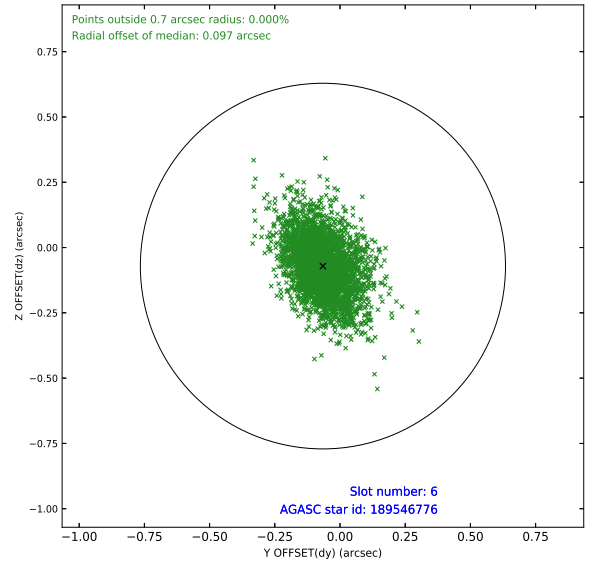
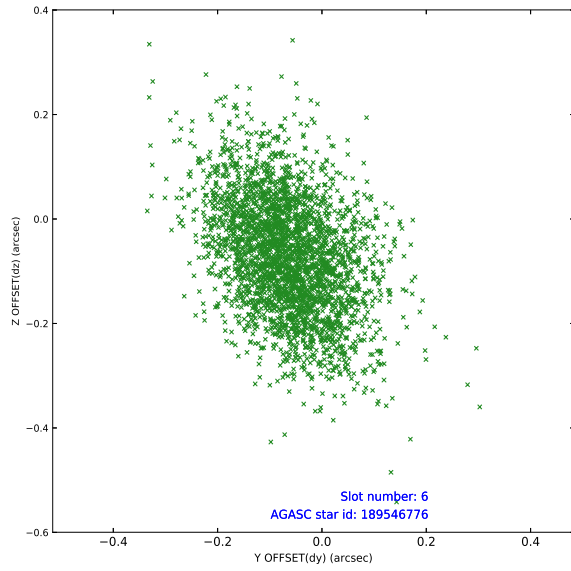
2.4.3 Slot 5



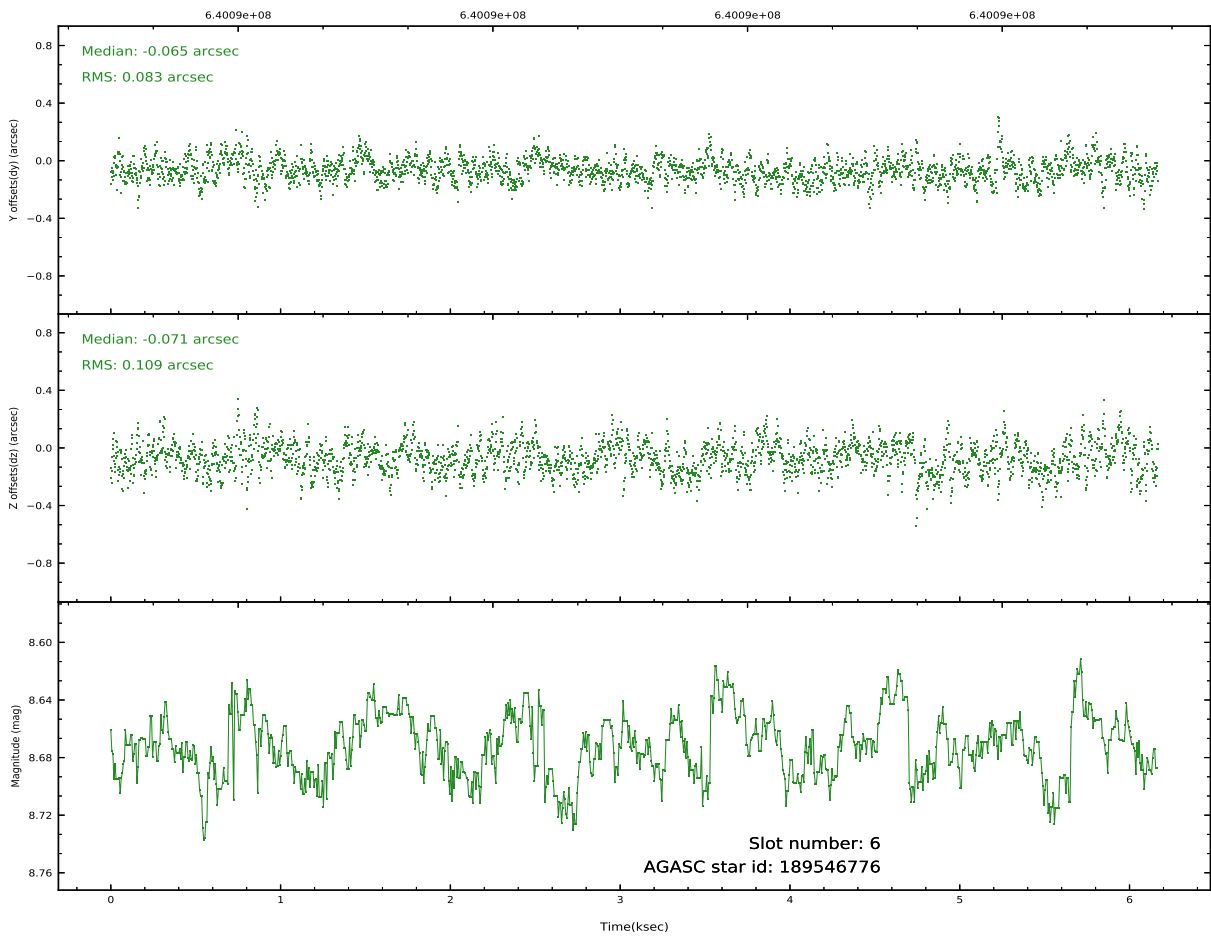
Time (s)



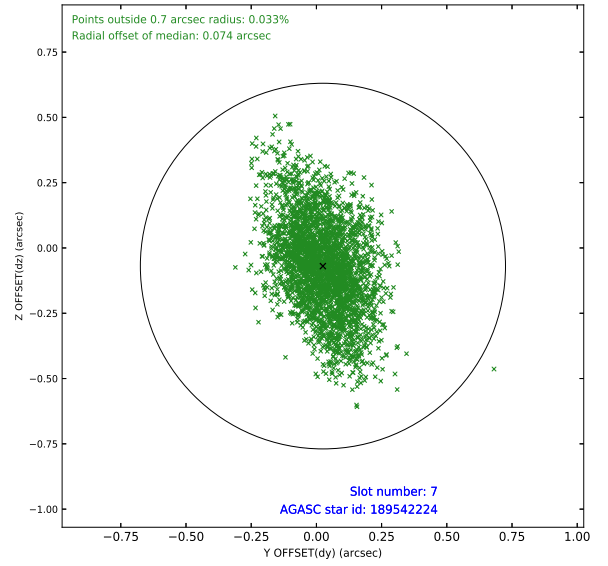
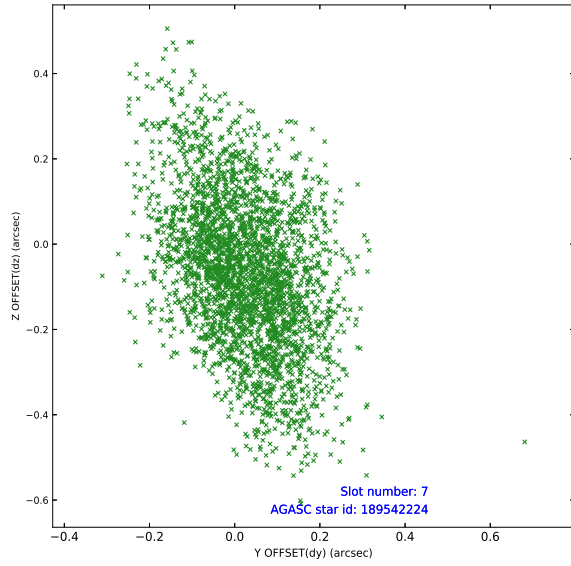
2.4.4 Slot 6



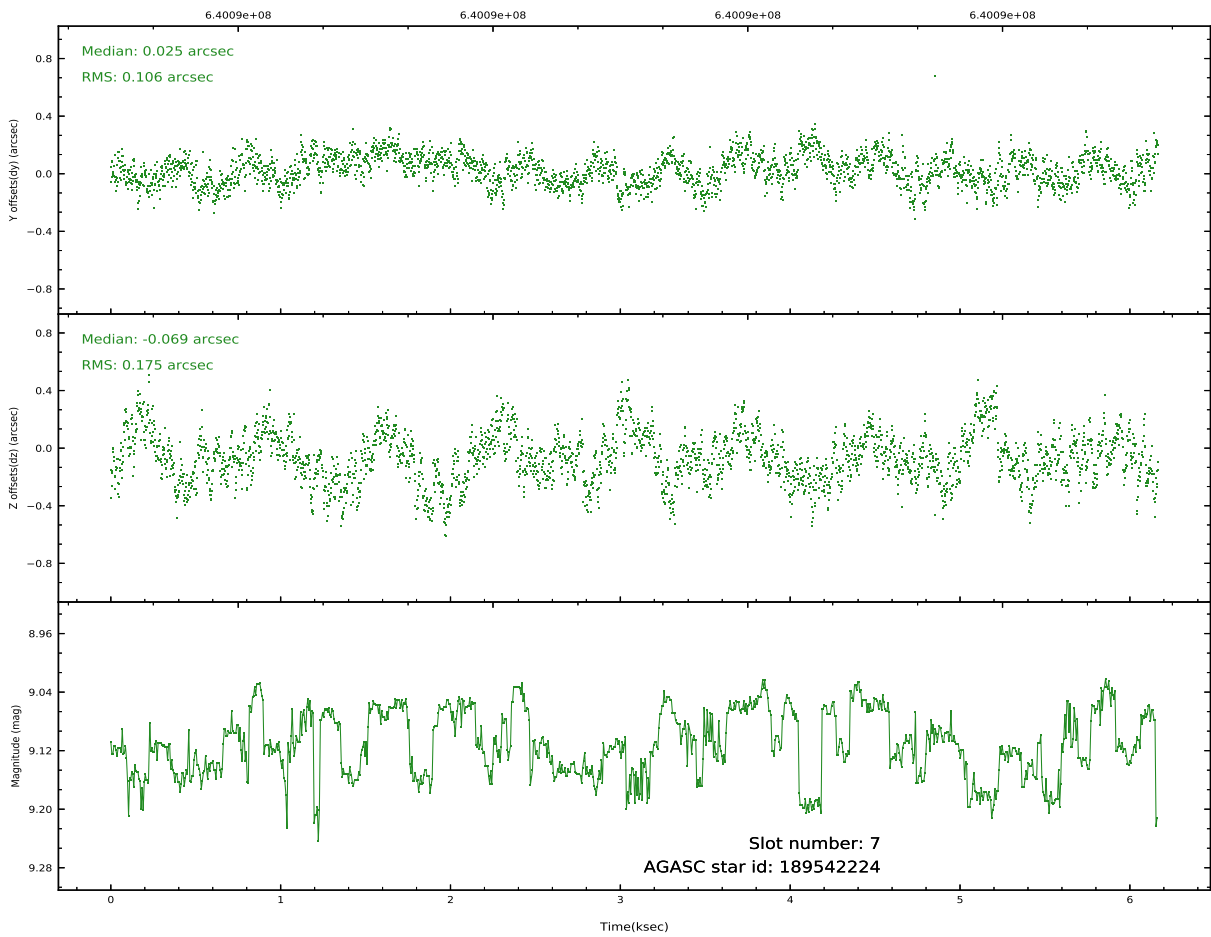
Time (s)



2.4.5 Slot 7

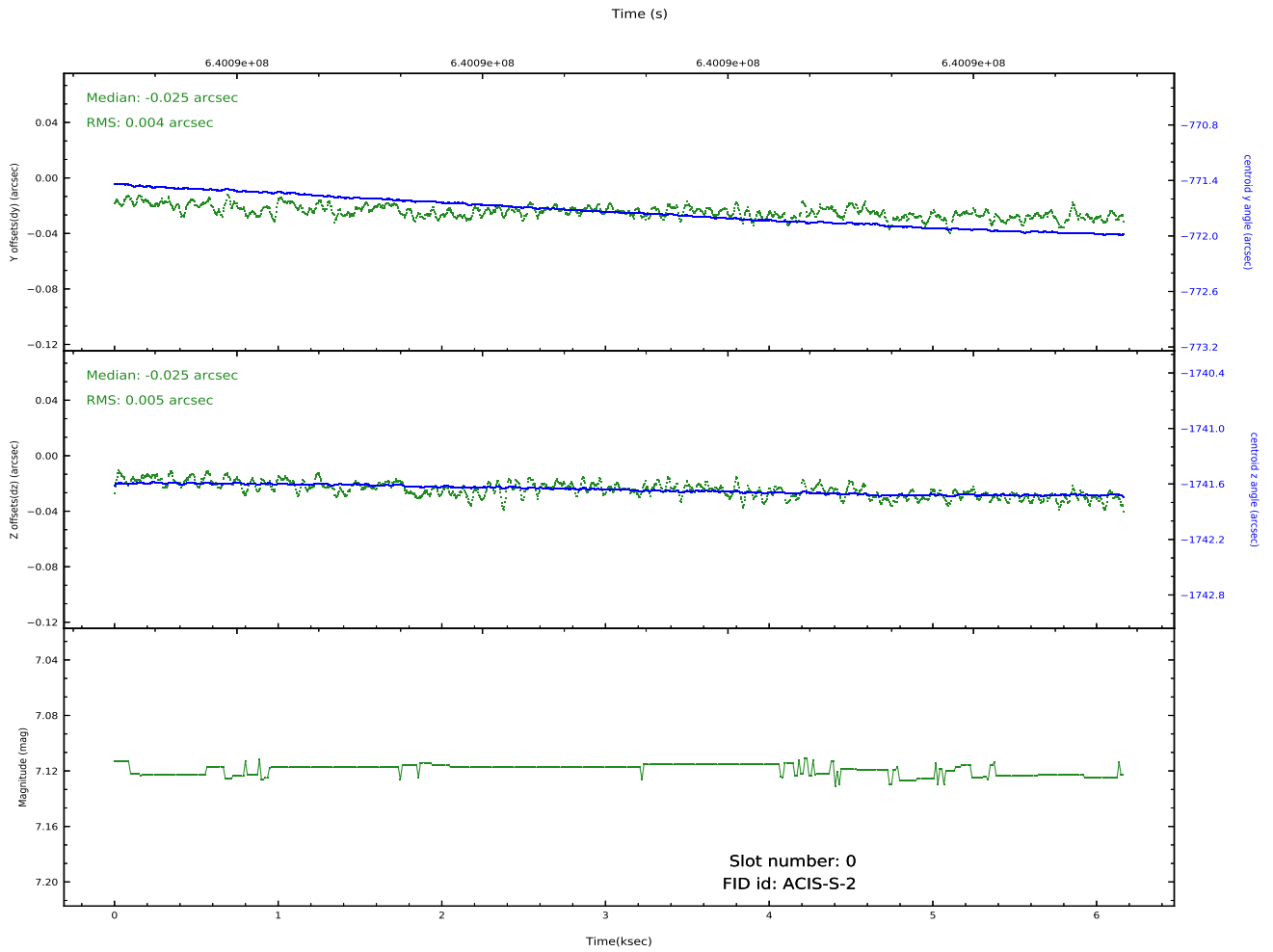
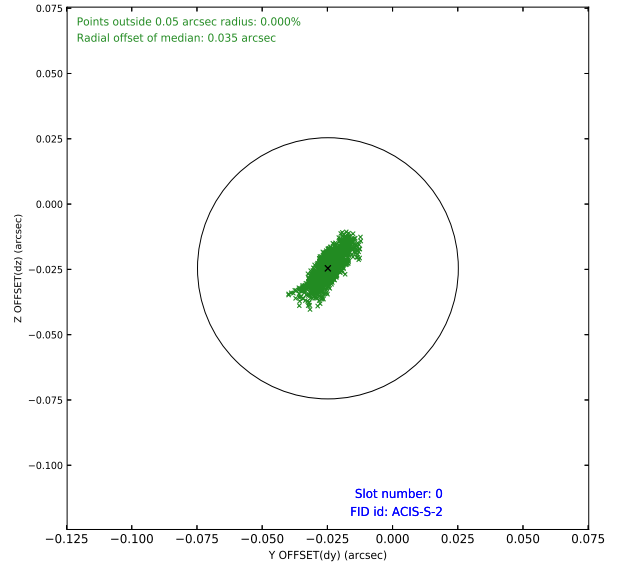
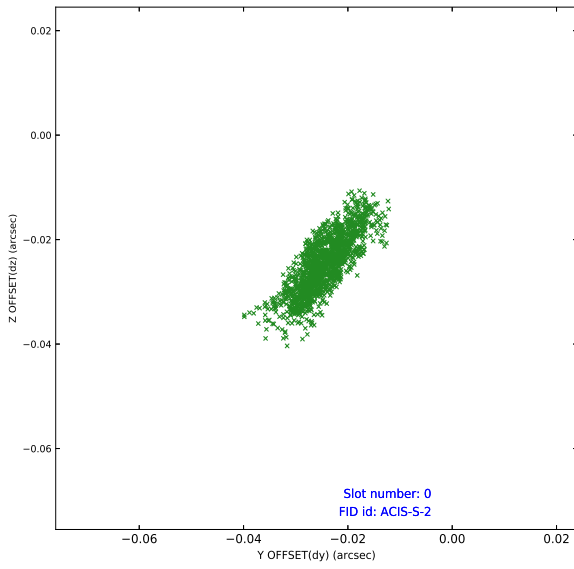


Time (s)

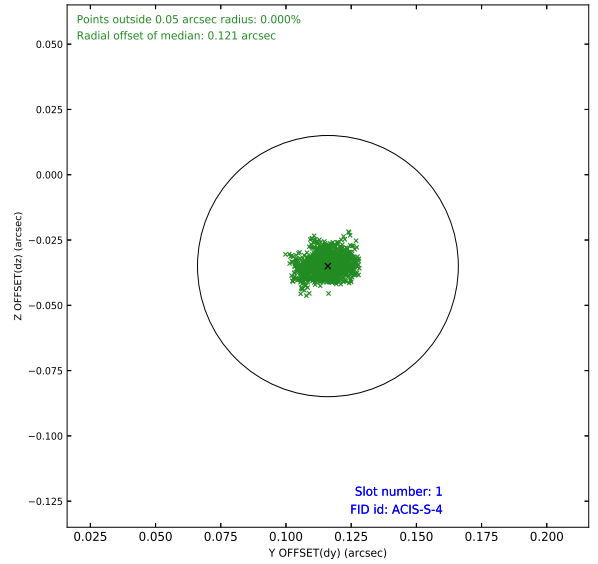
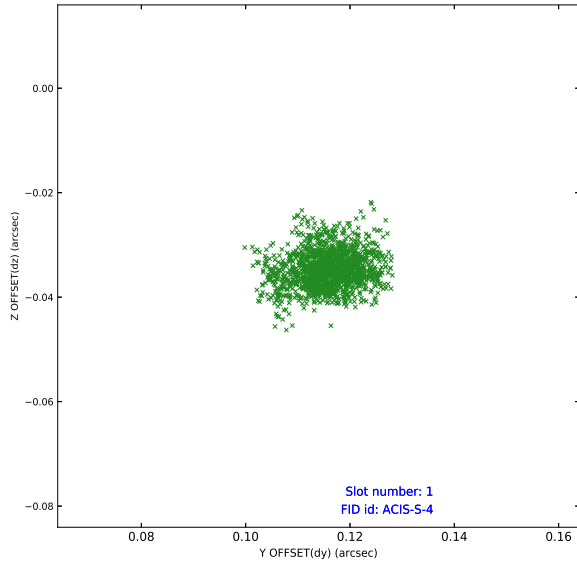


2.5 FID Slots

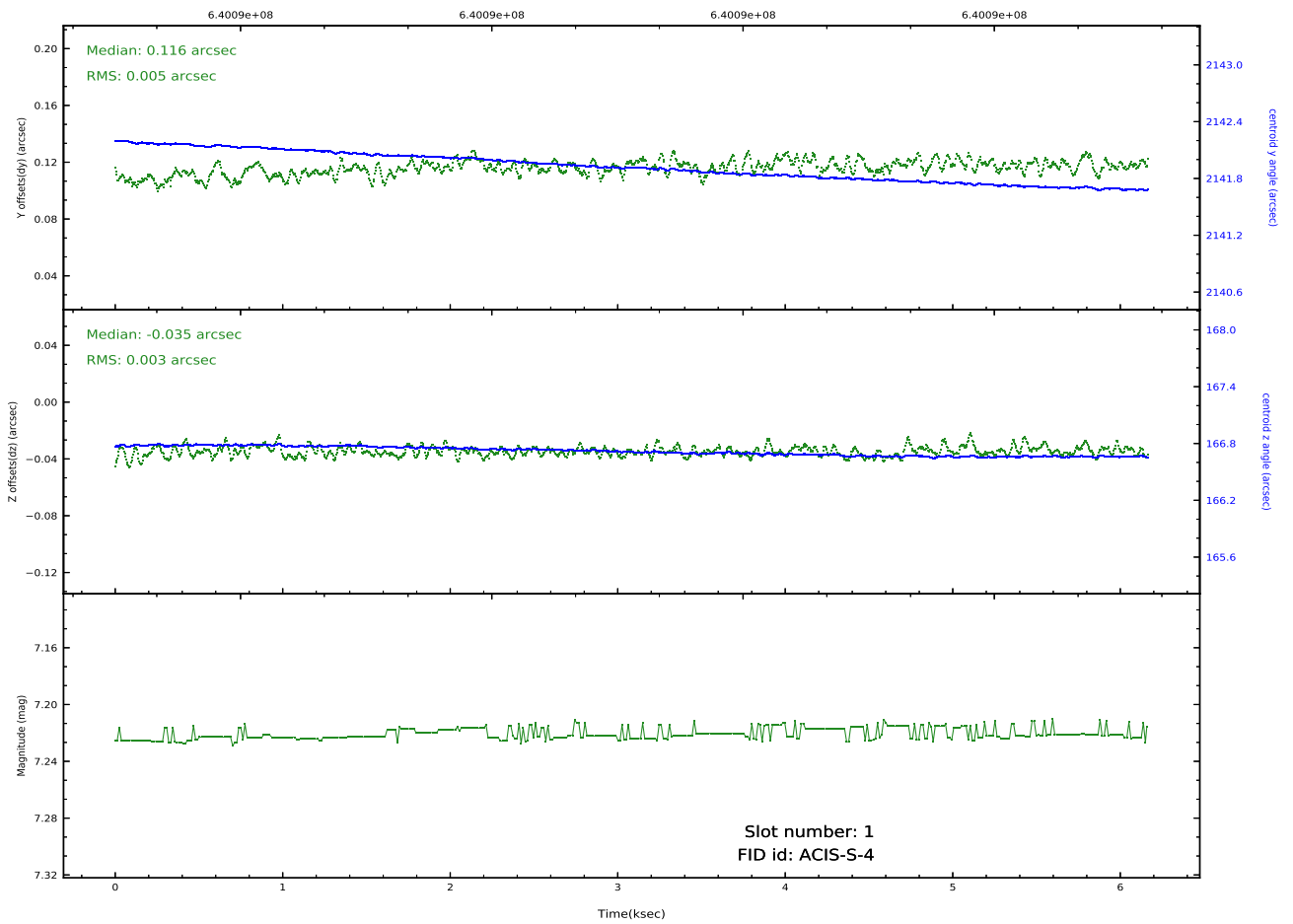
2.5.1 Slot 0



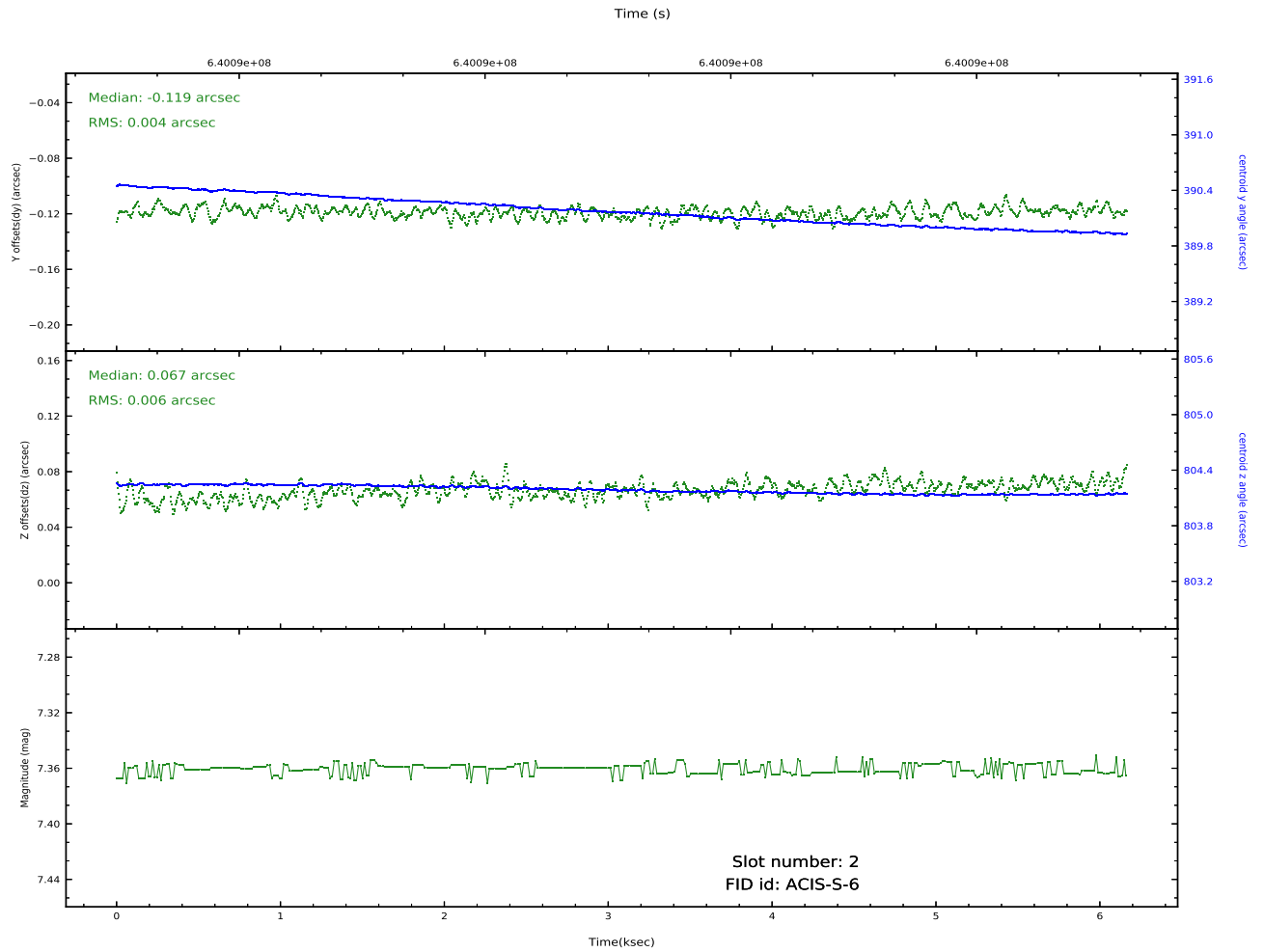
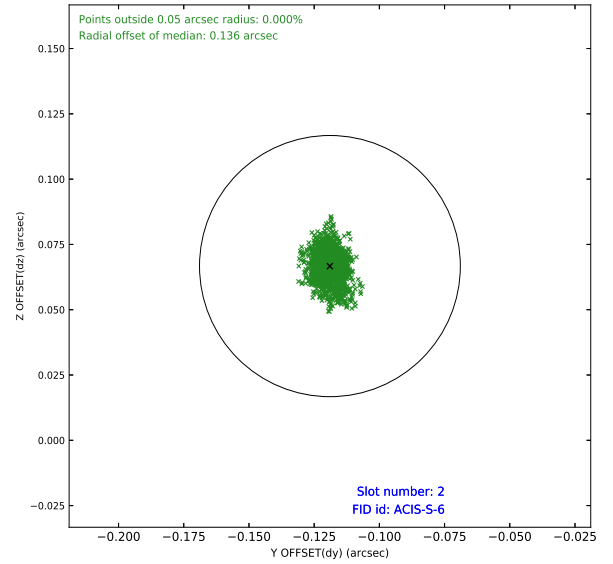
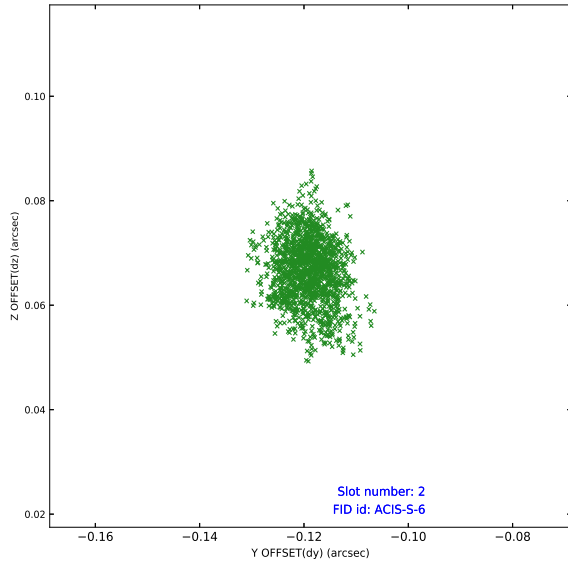
2.5.2 Slot 1



Time (s)



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2020.10.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.9520000458956

A.2 Comments